

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-014848**Date Inspected:** 14-May-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

CWI Inspectors: Mr. Geng Wei, Mr. Zhu Zhong Hai

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

OBG Bay 14

This QA Inspector observed ZPMC welder Mr. Zhao Jibo, stencil 055564 is using flux cored welding procedure WPS-B-T-2233-TC-U4b-F to make OBG weld SEG3001AA-008 at OBG segment 12AE near panel point 110. This QA Inspector observed a welding current of approximately 220 amps and 25.0 volts. This QA Inspector observed that Mr. Zhao Jibo appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Ms. Gao Yuling, stencil 217805 is using flux cored welding process WPS-B-T-2231-B-U2-F to make OBG weld SEG3001AL-019 between the side plate and corner assembly on the counterweight side of OBG segment 12AE near panel point 111. This QA Inspector observed a welding current of approximately 300 amps and 29.2 volts and Ms. Gao Yulin appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

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This QA Inspector observed ZPMC welder Ms. Chen Fenglian, stencil 206623 has been using flux cored welding procedure WPS-B-T-2231-B-U2-F to make OBG weld SEG3001AL-019 between the side plate and corner assembly on the counterweight side of OBG segment 12AE near panel point 110. This QA Inspector that Ms. Chen Fenglian appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Ms. Xie Jin Xia, stencil 048038 has been using flux cored welding procedure WPS-B-T-2231-B-U2-F to make OBG weld SEG3001AL-019 between the side plate and corner assembly on the counterweight side of OBG segment 12AE near panel point 110. This QA Inspector that Ms. Xie Jin Xia appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Rao Wei, stencil 049972 is using shielded metal arc welding process to make tack weld SEG3004R-009 between deck plate DP3041-001 diaphragm plates and floor beam FB3052-001 at panel point 109, OBG segment 12AW. This QA Inspector observed ZPMC QC Inspector Mr. Li Ming Yang is monitoring this welding. This QA Inspector observed Mr. Rao Wei appears to be certified to make these tack welds and the shielded metal arc welding electrodes are being stored in an electrically heated electrode storage container which is warm to the touch and the base material appears to have been preheated with a torch prior to commencement of the welding. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Pan Wei, stencil 218662 is using shielded metal arc welding process to make tack weld SEG3004M-009 between deck plate DP3044-001 diaphragm plates to floor beam FB3053-001 at panel point 110, OBG segment 12AW. This QA Inspector observed ZPMC QC Inspector Mr. Li Ming Yang is monitoring this welding. This QA Inspector observed Mr. Pan Wei appears to be certified to make these tack welds and the shielded metal arc welding electrodes are being stored in an electrically heated electrode storage container which is connected to an electrical power supply and the base material appears to have been preheated with a torch prior to commencement of the welding. Items observed on this date appeared to generally comply with applicable contract documents.

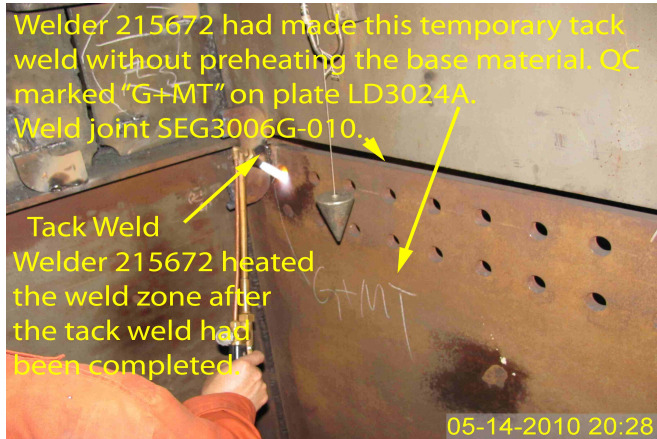
This QA Inspector observed ZPMC welder Mr. Xu Li Fuli, stencil 045136 is using shielded metal arc welding process to make tack weld SEG3004C-006 between deck plate diaphragm plates and floor beams near panel point 112.5, OBG segment 12AW. This QA Inspector observed ZPMC QC Inspector Mr. Li Ming Yang is monitoring this welding. This QA Inspector observed Mr. Xu Li Fuli appears to be certified to make these tack welds and the shielded metal arc welding electrodes are being stored in an electrically heated electrode storage container which is connected to an electrical power supply and the base material appears to have been preheated with a torch prior to commencement of the welding. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Lv Lihua, stencil 215672 is using shielded metal arc welding process to make a tack weld of a temporary alignment plate on the side of longitudinal diaphragm LD3024A, near floor beam FB3094-001 adjacent to weld joint SEG3006G-010 , OBG segment 12CW. This QA Inspector observed Mr. Xu Li Fuli appears to be certified to make this tack weld. This QA Inspector observed that the base material where this tack weld had been made does not appear to have been preheated prior to commencement of

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the welding. This QA Inspector informed ZPMC QC Inspector Mr. Li Ming Yang that this area does not appear to have been preheated prior to welding. Mr. Li Ming Yang measured the temperature of the base material and he agreed the base material was not preheated prior to welding. Mr. Li Ming Yang informed this QA Inspector that this weld will be ground off and the area will be MT inspected. He used a soapstone marker to indicate "G & MT" adjacent to this weld which tells other workers to "Grind and MT" this location. See the photograph below which shows Mr. Lv Lihua using a torch to heat the temporary weld after ZPMC QC Inspector Mr. Li Ming Yan marked "G & MT" adjacent to this temporary weld. Items observed on this date do not fully appear to comply with applicable contract documents.



Summary of Conversations:

See Above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
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Reviewed By:	Carreon,Albert	QA Reviewer
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